

REMARKS/ARGUMENTS

Reconsideration and allowance in view of the foregoing amendment and the following remarks are respectfully requested.

Claims 1-13 and 25-30 are now pending.

It is noted that the Notice of Draftsperson's Patent Drawing Review attached to the Examiner's Official Action objects to Figures 26A and 26B as connected. It is respectfully noted that, with this application, a request for approval of proposed drawing amendments was submitted under the old amendment procedure and new formal drawings were filed including corrected Figures 26A and 26B. It is believed that the proposed drawing correction and the submitted set of replacement of formal drawings fully responded to the objection included in the Draftsperson's notice. It is respectfully requested that the Examiner now confirm that the corrected formal drawings have been received and approved.

The Examiner objected that the oath or declaration was defective because the inventor's signature could not be recognized. Attached is a substitute declaration re-executed by the inventor. It is respectfully requested that the herewith inventor's declaration be substituted for that previously filed and that the objection to the declaration be withdrawn.

The Examiner objected that the Abstract of the Disclosure is too long. A substitute Abstract has been presented hereinabove. Reconsideration and withdrawal of this objection is requested.

The Examiner objected to claims 14 and 15 as including grammatical errors. Claims 14-18 have been canceled above and new claims 25-30 have been substituted therefor. New claims 25-30 were drafted bearing in mind the Examiner's objection and it is believed that these claims are in full compliance with 35 USC 112, all paragraphs.

Claim 17 was rejected under 35 USC 112, first paragraph, as failing to comply with the written description requirement. In this regard, the Examiner objects that "flon is not a common term" and cannot be identified in the chemical dictionary. Reconsideration of this objection is respectfully requested.

It is respectfully submit that it is known to those with skill in the art that "flon" is used as a general commercial name (generic name) of various chloro(bromo)fluorohydrocarbons, such as trichloromonofluoromethane (CCl_3F), dichlorodifluoromethane(CCl_2F_2), monochlorotrifluoromethane (CClF_3), 1,1,2,2-tetrachloro-1,2-difluoroethane($\text{CCl}_2\text{FCCl}_2\text{F}$), 1,1,2-trichloro-1,2,2-trifluoroethane ($\text{CCl}_2\text{FCClF}_2$), 1,2-dichloro-1,1,2,2-tetrafluoroethane ($\text{CClF}_2\text{CClF}_2$), in place of "Freon", which is the tradename (trademark) used by DuPont. It is respectfully submitted that the well known meaning of the term "flon" is evident from the fact that, according to a keyword search, at least about 792 issued U.S. Patents use the term "flon" and there are 49 issued patents which use the term "flon" and the term "Freon". Several of those patents define flon as a generic term including products sold under the trademark "Freon". In view of the foregoing, reconsideration and withdrawal of the Examiner's rejection is respectfully requested.

Claims 14-17 were rejected under 35 USC 112, second paragraph, as being indefinite. Claims 14-18 have been canceled above and new claims 25-30 have been substitute therefor. New claims 25-30 were drafted bearing in mind the Examiner's objection and it is believed that these claims are in full compliance with 35 USC 112, all paragraphs. Therefore, reconsideration and the withdrawal of the rejection under 35 USC 112, second paragraph, is requested.

Claim 16 has been objected to as being a substantial duplicate of claim 15. This objection has been obviated by the amendment presented above.

Claims 14-17 were rejected under 35 USC 102(b) as bearing clearly anticipated by Zeff. Furthermore, claim 18 was rejected under 35 USC 102(b) as anticipated by or,

in the alternative, under 35 USC 103 as obvious over Jeff [sic; Zeff]. Applicant respectfully traverses these rejections.

Claim 14 has been amended above to define the excimer lamp more clearly, based on the description, e.g., at page 10, line 20-page 11, line 1 and with reference to Figures 1-3.

In the present invention an organic compound contained in a liquid or gas is decomposed by applying a high frequency voltage from 1 to 20 MHZ between the inner electrode and the outer electrode of an excimer lamp having a specific structure and disposed in a decomposition container.

Anticipation under Section 102 of the Patent Act requires that a prior art reference disclose every claim element of the claimed invention. See, e.g., Orthokinetics, Inc. v. Safety Travel Chairs, Inc., 806 F.2d 1565, 1574 (Fed. Cir. 1986). While other references may be used to interpret an allegedly anticipating reference, anticipation must be found in a single reference. See, e.g., Studiengesellschaft Kohle, G.m.b.H. v. Dart Indus., Inc., 726 F.2d 724, 726-27 (Fed. Cir. 1984). The absence of any element of the claim from the cited reference negates anticipation. See, e.g., Structural Rubber Prods. Co. v. Park Rubber Co., 749 F.2d 707, 715 (Fed. Cir. 1984). Anticipation is not shown even if the differences between the claims and the prior art reference are insubstantial and the missing elements could be supplied by the knowledge of one skilled in the art. See, e.g., Structural Rubber Prods., 749 F.2d at 716-17.

In the method disclosed in Zeff, water containing volatile organic halogenated compounds, such as trichloroethylene, to be decomposed is first treated in a reactor tank 14 equipped with an ultraviolet lamp 20, to which an ozone/air mixture 22 is introduced to oxidize most of trichloroethylene in solution. Following treatment of the water with ozone and UV light, trichloroethylene and other volatile compounds colatized by the ozone/air mixture are pumped to a detoxification unit 29 which is essentially a

column of porous silica gel wherein UV lights 31 are also positioned. Detoxification unit 29 decomposes trichloroethylene not decomposed by the action of the UV light and ozone in the reactor tank 14 (col.2, line 51 to col. 3, line 33, Figures 1 and 5). In other words, volatile organic compounds in water are first decomposed by the action of ozone with the help of UV light and is volatilized to a gaseous state which is further subjected to decomposition treatment in a detoxification column packed with porous silica gel irradiated with UV light.

It should be noted that there is no disclosure or even suggestion in the cited reference to of Zeff of decomposing an organic compound contained in a liquid or gas, by applying high frequency voltage from 1 to 20 MHz between the inner electrode and the outer electrode of an excimer lamp having a specific structure and disposed in a decomposition container, as claimed in the present application.

With regard to dependent claims 27 and 30, the wavelength of UV light is not, *per se*, a subject of the invention but rather a specific range of wavelength of UV light to be applied in the specific method of the invention which, it is respectfully submitted, is novel and not obvious from Zeff.

For all the reasons advanced above, reconsideration and withdrawal of the Examiner's rejection is submitted to be in order.

All objections and rejections having been addressed, it is respectfully submitted that the present application is in condition for allowance and an early Notice to that effect is earnestly solicited.

NAKAMURA
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Respectfully submitted,

NIXON & VANDERHYE P.C.

By:

A handwritten signature in black ink, appearing to read "Michelle N. Lester", written over a horizontal line.

Michelle N. Lester

Reg. No. 32,331

MNL:slj
1100 North Glebe Road, 8th Floor
Arlington, VA 22201-4714
Telephone: (703) 816-4000
Facsimile: (703) 816-4100